COMBATING TERRORISM TECHNOLOGY SUPPORT OFFICE
TECHNICAL SUPPORT WORKING GROUP (TSWG)

BROAD AGENCY ANNOUNCEMENT (BAA)
W91CRB-05-T-0036

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Due Date for Receipt of Phase 1 Quad Charts:

No Later Than April 4, 2005

CB – Chemical, Biological, Radiological, and Nuclear Countermeasures

IS – Investigative Support and Forensics

PS – Physical Security

TTD – Training Technology Development

**All submittals are due by 1600; 4:00 p.m.
Eastern Time Zone (ET) on the above date**

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March 3, 2005

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1. INTRODUCTION.

This is the Combating Terrorism Technology Support Office (CTTSO) Technical Support Working Group (TSWG) Broad Agency Announcement (BAA) issued under the provisions of paragraph 6.102(d)(2) of the Federal Acquisition Regulation (FAR), to provide for the competitive selection of research proposals. Contracts based on responses to this BAA are considered to be the result of full and open competition and in full compliance with the provisions of Public Law (PL) 98-369, "The Competition in Contracting Act of 1984." Awards for submittals under this BAA are planned in Fiscal Year (FY) 2006; however, some awards may be in late FY 2005. Funds may not be available for all requirements under this BAA. No contract awards will be made until appropriated funds are available from which payment for contract purposes can be made.

1.1. Approach.

A three-phased proposal selection process will be employed for this solicitation to minimize cost and effort of prospective offerors. Phase I will consist of the solicitation, receipt, and evaluation of a one-page Quad Chart. For accepted submissions *only*, the submitter will be requested to provide the next phase submission. Phase II will consist of the solicitation, receipt, and evaluation of a 12-page White Paper. Phase III will consist of the solicitation, receipt, and evaluation of a full proposal (not to exceed 50 pages).

1.2. HBCU/MI and Small Business Set Aside.

The Government encourages nonprofit organizations, educational institutions, small businesses, small disadvantaged business (SDB) concerns, Historically Black Colleges and Universities (HBCU), Minority Institutions (MI), women-owned businesses, and Historically Underutilized Business (HUB) zone enterprises HBCU/MIs as well as large businesses and Government laboratories to submit research proposals for consideration and/or to join others in submitting proposals; however, no portion of the BAA will be set-aside for these special entities because of the impracticality of reserving discrete or severable areas of research and development in any specific requirement area. A goal of 2.5% of total dollars awarded under the listed mission areas will be considered for HBCU/MI and a goal of 2.5% of total dollars awarded under the listed mission areas will be considered for small businesses for a total goal of 5%. The final determination will be made based on the individual technical merits of the proposal and the budget constraints within the mission priorities. To ensure full consideration in these programs, registration in the BAA Information Delivery System (BIDS), described later in this document, must include the appropriate business type category as well as accurate and relevant information requested in the BIDS registration.

1.3. Limitation of Funds.

The Government intends to incrementally fund contracts awarded from this BAA as provided by FAR 52.232-22, "Limitation of Funds." Most proposals awarded are anticipated to be from 6 to 24 months in duration. To facilitate incremental funding, proposals shall include the cost and schedule by a task-phased structure with clear exit criteria, and shall be inclusive of all work to complete the effort including any options. It is anticipated that the entire effort be negotiated with the initial contract award.

1.4. Technical Evaluation Support.

It is the intent of this office to use contractor support personnel in the review, evaluation, and administration of all submittals for this BAA. All individuals in this category that will have access to any proprietary data shall certify that they will not disclose any information pertaining to this solicitation including any submittal, the identity of any submitters or any other information relative to this BAA. Submission of information in response to this BAA constitutes permission to disclose information to certified evaluators under these conditions.

1.5. BAA Package Download.
This BAA Package can be downloaded electronically in its entirety from **www.bids.tswg.gov** under Downloads BAAs. Registration is not required to download the BAA package; however, a BIDS registration is required to upload a response to the BAA.

1.6. BAA Contractual and Technical Questions.
All contractual and technical questions regarding this BAA must be directed to the Contracting Officer, 05-T-0036@tswg.gov. Contractual questions and answers will be posted periodically under FAQ.

1.7. BIDS Help Requests and FAQs.
For help with BIDS, submit questions to the BIDS administrators at bidshelp@tswg.gov or by accessing the **HELP REQUEST** link located in the left-hand panel of the BIDS Homepage. Include a correct email address and a description of the request in the text block provided. Offerors are encouraged to periodically review the BAA Frequently Asked Questions (FAQs) located at www.bids.tswg.gov.

NOTE: Persons submitting proposals are advised that only the Contracting Officer may obligate the Government to any agreement involving expenditure of Government funds.

2. GENERAL INFORMATION.

This section includes information applicable to all contracts that may be awarded under this BAA.

2.1. Eligibility.
To be eligible for contract award, an offeror must meet certain minimum standards pertaining to financial solvency/resources, ability to comply with the performance schedule, prior record of performance, integrity, organization, experience, operational controls, technical skills, facilities, and equipment. See FAR 9.104. Additionally, all offerors MUST be registered in the Central Contractor Registration (CCR) database as indicated in DFARS 204.7300. The website address for CCR database is http://www.ccr.gov. Contractors must complete on line representation and certifications (ORCA) at www.bpn.gov/orca. This and other helpful links are also provided on the BIDS Homepage.

2.2. Procurement Integrity, Standards of Conduct, Ethical Considerations.
Certain post-employment restrictions on former federal officers and employees may exist, including special Government employees (Section 207 of Title 18, United States Code (USC)). If a prospective offeror believes that a conflict of interest does exist, the situation should be raised to the issuing office's contracts representative before time and effort is expended in preparing a proposal.

2.3. Definitions.

2.3.1. Small Business Concern.
A concern that is independently owned and operated; is not dominant in the field of operation in which it is bidding on Government contracts; and meets the size standards in FAR 19.102.

2.3.2. Small Disadvantaged Business Concern.
"Small disadvantaged business concern" as used in FAR Part 19 (except for FAR Sections 52.212-3(c)(4) and 52.219-1(b)(2) for general statistical purposes and 52.212-3(c)(9)(ii), 52.219-22(b)(2), and 52.219-23(a) for joint ventures under the price evaluation adjustment for small disadvantaged business (SDB) concerns), means an offeror that represents, as part of its offer, that it is a small business under the size standard applicable to the acquisition; and either:
(1) It has received certification as a small disadvantaged business concern consistent with 13 CFR part 124, subpart B; and
(i) No material change in disadvantaged ownership and control has occurred since its certification;
(ii) Where the concern is owned by one or more disadvantaged individuals, the net worth of each individual upon whom the certification is based does not exceed $750,000 after taking into account the applicable exclusions set forth at 13 CFR 124.104(c)(2); and
(iii) It is identified, on the date of its representation, as a certified SDB concern in the database maintained by the Small Business Administration (SBA) (PRO-Net); or
(2) For a prime contractor, it has submitted a completed application to the SBA or a private certifier to be certified as a small disadvantaged business concern in accordance with 13 CFR part 124, subpart B, and a decision on that application is pending, and that no material change in disadvantaged ownership and control has occurred since it submitted its application. In this case, a contractor must receive certification as an SDB by the SBA prior to contract award.

2.3.3. North American Industry Classification System.
Establishments that specialize in performing Professional, Scientific and Technical Activities for others are coded 541710 under the North American Industry Classification System (NAICS). The small business size standard for Classification 541710 is 500 employees.

2.4. Restrictive Markings on Proposals.
All proposals should clearly indicate content disclosure limitations. Submittals may be marked as "Proprietary" or words to that effect; however, markings such as "Company Confidential" or other phrases that may be confused with national security classifications shall be avoided.

2.5. Submission Handling/Rights in Technical Data and Computer Software/Patent Rights.

2.5.1. Procurement Integrity.

The Government intends to comply with FAR 3.104 in its treatment of information submitted in response to this BAA solicitation and marked with the individual or company's legend.

2.5.2. Rights in Technical Data and Computer Software.

Rights in technical data, computer software and software documentation provided in the proposal shall be treated in accordance with the DFARS 252.227-7016, *Rights in Bid and Proposal Information*. Rights in technical data, computer software and computer software documentation in the resultant contract shall be in accordance with DFARS 252.227-7013 (regarding technical data) and DFARS 252.227-7014 (regarding computer software and software documentation). Both clauses (DFARS 252.227-7013 and –7014) shall be included in any non-commercial contract exceeding the simplified acquisition threshold. Table 1 contains other clauses to be included in the contract.

Table 1. Other Clauses to be included in the contract.

DFARS	Title
252.227-7017	Identification and Assertion of Use, Release, or Disclosure Restrictions
252.227-7019	Validation of Asserted Restrictions - Computer Software
252.227-7025	Limitations on the Use or Disclosure of Government Furnished Information Marked with Restrictive Legends
252.227-7027	Deferred Ordering of Technical Data or Computer Software
252.227-7028	Technical Data or Computer Software Previously Delivered to the Government;
252.227-7030	Technical Data - Withholding of Payment
252.227-7037	Validation of Restrictive Markings on Technical Data.

2.5.3. Submission Information and FOIA.

Records or data bearing a restrictive legend may be included in the proposal. The offeror is cautioned; however, that portions of the proposal may be subject to release under terms of the Freedom of Information Act (FOIA), 5 U.S.C. 552, as amended. In accordance with FOIA regulations, the offeror will be afforded the opportunity to comment on, or object to the release of proposal information.

2.6. Report Requirements.

The number and types of deliverable reports shall be specified in the contractual document. The reports shall be prepared and submitted in accordance with the procedures contained in the contract. A Final Report that summarizes the project and associated tasks is required at the conclusion of each contract, notwithstanding the fact that the research may be continued under a follow-on contract. Monthly Reports documenting program and financial status are required. In addition, test plans, test and technical reports, technical data, specifications, computer programs, or other data should be specified as appropriate for the effort proposed.

2.7. Subcontracting.

Pursuant to Section 8(d) of the Small Business Act (15 U.S.C. 637(d)), it is the policy of the Government to enable small business and small disadvantaged business concerns to be considered fairly as subcontractors to contractors performing work or rendering services as prime contractors or subcontractors under Government contracts, and to assure that prime contractors and subcontractors carry out this policy.

2.8. Animal or Human Testing Compliance.

The contractor is responsible for compliance with all laws and regulations governing the use of animals or human subjects in research projects. Any contract resulting from this BAA that may involve the testing of animals shall include the following language:

> Any contractor performing research on warm blooded vertebrate animals shall comply with the Laboratory Animal Welfare Act of 1966, as amended, 7 U.S.C. §§ 2131 - 2156, and the regulations promulgated thereunder by the Secretary of Agriculture in 9 C.F.R. Parts 1 through 4, pertaining to the care, handling, and treatment of vertebrate animals held or used for research, teaching, or other activities supported by Federal contract awards. In addition, the contractor shall comply with the provisions of Department of Defense Directive 3216.1, as implemented by SECNAVINST 3900.38B, and Defense Federal Acquisition Regulation supplement clause 252.235-7002, "Animal Welfare," which is incorporated into this contract.

Any contract resulting from this BAA that may involve the use of human subjects shall include the following language:

> No federal funds will be expended for research involving human subjects unless the contractor is in compliance with the regulations promulgated by the Office of the Secretary of Defense in 32 C.F.R. Part 219, pertaining to the protection of human subjects. In addition, the contractor shall comply with the provisions of Department of Defense Directive 3216.2. If human subjects are to be used at any time during the project, the contractor must provide Institutional Review Board (IRB) approval for the use of human subjects. If the protocol involves more than minimal risk to human subjects, as defined in 32 C.F.R. § 219.102(i), then the assurance and IRB approval must be submitted to CTTSO prior to award of a contract. If minimal risk to human subjects is involved, then the documents shall be on file with CTTSO prior to the start of research involving human subjects.

3. PROPOSAL PREPARATION.

This section provides information needed by the individual preparing the proposal for submission under this BAA.

3.1. General Guidance.

All submittals must strictly follow the instructions in this announcement and include all specified information to avoid delays in evaluation or disqualification.

3.1.1. BAA Information Delivery System (BIDS).

The BIDS, in operation at www.bids.tswg.gov, will be used to provide public access to the BAA package and will be used to collect all **unclassified** submittals under this BAA and all classified placeholder records as described below.

3.1.1.1. Submitter Registration.

A Submitter Registration is required to respond to this BAA. Existing accounts are acceptable for a new BAA if the company information is the same. During registration, the offeror must complete all mandatory fields on the form including a User Name that will be used for login. Registration acceptance for submitters is automatic, but may take a few minutes to be recognized by BIDS, and will be transmitted by email indicating the User Name. The email address is used for all official notifications and should be the point of contact (POC) for the Government Contracting Officer.

3.1.1.2. User Accounts and Password Resets.

Registration account information such as the POC, email, and password can be updated after login. A **Forgot My Password** link on the BIDS Homepage allows registered users with a valid email address to automatically reset a password. The system will verify the account information and send a new password via email.

3.1.1.3. Registration and Account Help.

Help requests can be addressed to TSWG BAA Administrators at **bidshelp@tswg.gov** or by accessing the **HELP REQUEST** link in the left-hand panel of the BIDS Homepage.

3.1.1.4. Format and Submittal Upload.

All unclassified and any classified placeholder responses shall be uploaded to BIDS in the electronic format specified and each must include all information requested for each submittal type as described in this document.

3.1.1.5. Cover Page/Submittal Markings.

The cover page of all submittals and the header for all Quad Charts shall be marked with the appropriate *BAA Announcement Number*, the *Document Identifier*, and *Proposal Title*. For additional cover page requirements, a sample is provided in BIDS under **Downloads**; ***Reference Materials***.

3.1.1.6. Document Identifier.

The offeror shall insert a unique document identifier in the header of each submittal that MUST match the document identifier in the BIDS submission record. When creating a submission record in BIDS, the prefix (underlined in the example) is automatically generated and attached to the **submitter internal tracking (SIT) number which is entered by the submitter**. The system enforces unique SIT numbers and will not allow a document upload if the SIT number has already been used.

Document identifiers are formatted as follows:

XX-REQTNO-USERNAME-SIT

XX – Identifies the subgroup or mission area.
REQTNO – Identifies the requirement number.
USERNAME – Identifies the BIDS user name or submitter's login name.
SIT – Identifies the Submitter Internal Tracking Number.

Suggest that the SIT number indicate the phase or document type as follows, where XXXX is an alphanumeric entry**:**

Quad Charts:	XXXX-QC	or	XXXX-01
White Papers:	XXXX-WP	or	XXXX-02
Full Proposals:	XXXX-FP	or	XXXX-03

The constructed document identifier is frequently used by the evaluation team to identify each submittal and to connect downloaded/printed documents with evaluation records posted into on-line collaboration software.

3.1.2. BIDS Security and Submittal Changes.
All data uploaded to BIDS is secure from public view or download. All submissions will be considered proprietary/source selection sensitive and protected accordingly. The documents can only be reviewed by the registrant, authorized Government representatives, and assigned evaluators. Changes to uploaded responses will be permitted **up to the closing date and time**. If the offeror wishes to submit a modified requirement response, the offeror must first delete the previous response and then upload a modified document. Changes after the requirement due date will not be permitted.

3.1.3. Special Handling/Procedures for Classified Information.
If a submittal contains classified information, the offeror must first create a placeholder record in BIDS with an unclassified cover page attachment. Identify in the comments section of the submission record why the submittal cannot be uploaded. The BIDS tracking number must be clearly identified on the mailed submittal. **Classified responses (up to SECRET) must be appropriately and clearly marked, packaged, and shipped in accordance with classified material handling procedures and security regulations pertaining to the level of classification.**

To obtain mailing instructions for classified submittals, email BAAsecurity@tswg.gov.

Classified submittals MUST be received by the applicable due date and time. Classification does not in any way eliminate the offeror's requirement to comply with all instructions in this BAA.

3.2. Phase I Submittals.
Offerors shall respond to Phase I of this BAA using a one-page Quad Chart. This is a single 8 ½ x 11 inch page, divided into four sections, that conveys the proposed solution. A sample format has been provided at the BIDS web site under **Downloads**, **Reference Materials** in the left hand panel. If more than one page is submitted only the first page will be evaluated.

3.2.1. Phase I Due Date and Time.
All Quad Charts must be received electronically through BIDS (unclassified) or tracked in BIDS and received by mail (classified only) no later than **1600 (4:00 p.m.) Eastern Time zone (ET) on April 4, 2005**. BIDS will not allow proposals to be uploaded or modified after the closing date and time. **Any proposal submitted via other means or that is late will not be considered by the Government.** Refer to Section 3 for special handling and procedures for classified submissions.

3.2.2. Electronic File Format.
The Quad Chart shall be submitted in Microsoft Office 2000 (Word or PowerPoint), or Adobe Acrobat (PDF – portable document format). The document must be print-capable, without password, using text font and graphic file formats that will cause the document to be NO LARGER THAN 500KB IN FILE SIZE. Graphic images inserted into the document should be in a file format (such as GIF/JPEG) that will minimize file size and support clear SVGA display and document printing (96 DPI recommended). Improper formatting and/or submittals that cannot be opened or viewed due to formatting will not be considered in the BAA competitive process.

3.2.3. Technical Content.
The offeror should ensure that the proposal meets the needs of the requirement including cost, technical feasibility, and other evaluation criteria as identified in this BAA. Quad Chart elements include a document header and four quadrants consisting of a graphical depiction of the solution, an operational capability summary, the technical approach, and schedule, cost and contact information. Upon request, the offeror may be required to provide access to pending patent applications.

3.2.3.1. Graphical Depiction.
The top left quadrant should contain a graphical depiction, photograph, or artist's concept of the proposed solution or prototype. Include descriptive text as needed for clarification. Ideally, this will convey the prototype concept, use, capability, and any relevant size or weight relationships based on the published requirement.

3.2.3.2. Operational Capability Summary.
The top right quadrant should contain the operational and performance capabilities summary. Describe any basic, new or enhanced capabilities the system will provide to meet the published requirement. In bullet form, list key aspects of performance, capability, operational use, relevant software or hardware specifications, and planned interface and/or compatibility.

3.2.3.3. Technical Approach.
The bottom left quadrant should contain the proposed technical approach. Specifically, describe the technology involved, how it will be used to solve the problem, actions done to date, and any related on-going efforts. Briefly describe the tasks to be performed for each phase if applicable. A bullet list is acceptable.

3.2.3.4. Cost, Schedule, and Contact Information.
The bottom right quadrant should contain the cost, schedule, product deliverables and contact information. A rough order of magnitude or ROM for the proposed effort should be by task or phase along with the period of performance (POP) for each. Include the total cost and POP as well as the proposed decision points or exit criteria for each phase. Next, a list of products and reports resulting from this submission should be provided. Include any prototype hardware or software, requirements documents, plans, reports, specifications, manuals, drawings, or other information appropriate for the work to be performed, and the all minimum standard reporting as defined in this BAA. Corporate information should include the submitter's company name, point of contact, address, phone number, and email address. If a significant teaming partner is planned that may impact the decision to accept this submission, include that company or agency name and location.

3.2.3. Notification to Offeror.
Following review of the Quad Chart, the Government will notify the offeror when a submittal has been accepted or rejected. Notification of acceptance accompanied with a request to submit the Phase II requirement (White Paper) will be emailed to the offeror's contracting authority as *entered in the BIDS registration* and will indicate the new submittal due date and time. Notifications of rejection will likewise be emailed to the address provided by the offeror during BIDS registration. **Debriefings for Quad Charts will not be provided due to the nature of BAAs**. It should generally be assumed that the reason a proposed solution was not considered for further review was that it did not fit the needs of the TSWG, that it was too costly, or that it failed to meet

requirements as specified for technical evaluation.

3.2.4. Status and Inquiries.
Phase I is complete when all submissions have been accepted or rejected in accordance with this BAA. Inquiries by phone concerning the status of Quad Charts will not be accepted. Submitters are able to check the status of any submission by accessing the BIDS website under "My Submissions."

3.3. Phase II Submittals.
The second phase consists of a **12 page** White Paper including figures, charts, and tables, but excluding the cover page. All submittal pages shall be 8 ½ x 11 inch, double-spaced with fonts no smaller than 10 point. All margins shall be one inch. If the White Paper contains more than 12 pages, only the first 12 pages will be evaluated.

3.3.1. Phase II Due Date and Time.
All White Papers must be received electronically through BIDS (unclassified) or tracked in BIDS and received by mail (classified only) **no later than the due date and time (ET) specified in the notification email**. To upload a next phase document, locate and open the *accepted* record in BIDS and select **Create Next Submission**. BIDS will not allow proposals to be uploaded or modified after the closing date and time**. Any proposal submitted via other means or that is late will not be considered by the Government.** Refer to Section 3 for special handling and procedures for classified submissions.

3.3.2. Electronic File Format.
The White Paper shall be submitted in Microsoft Office 2000 (Word) or Adobe Acrobat (PDF). The document must be print-capable and without password. All text and graphic content must not exceed 500KB in total file size. Graphic images inserted into the document should be in a file format (such as GIF/JPEG) that will minimize file size and support clear SVGA display and document printing (96 DPI recommended). Improper formatting and/or submittals that cannot be opened or viewed due to formatting will not be considered in the BAA competitive process.

3.3.3. General and Cover Page Format.
The offeror should ensure that the submittal meets the needs of the requirement including cost, technical feasibility, and other evaluation criteria as identified in this BAA. The White Paper shall provide information to support the Quad Chart, and shall describe the problem/threat addressed, the detailed solution and approach, deliverables, work to be performed, the offeror's expertise to effect the proposed solution, and the estimated schedule and cost. If clarification is requested, the offeror shall address each question or concern. The cover page shall include the data specified in the sample provided in BIDS under **Downloads, Reference Materials**. Each page of the submission shall contain the document identifier in the header.

3.3.4. Technical Content.
The White Paper shall describe the problem/threat addressed in the BAA Requirement and include:

3.3.4.1. Description of the proposed solution including underlying theory, a suggested concept of operations and potential users. Include a description of similar work performed, including what agency funded the effort.

3.3.4.2. Description of the proposed tasks and associated deliverables. Include definition of anticipated risks, planned mitigation efforts, work to be performed by the offeror, by other organizations, and any required Government furnished material (GFM) or information (GFI). Include clear descriptions of proposed phases, decision points and any options. The offeror's proposed position on ownership of intellectual property shall also be described. Upon request, the offeror may be required to provide access to pending patent applications.

3.3.4.3. A Master Project Schedule preferably in Gantt chart format. Schedule should show

planned start and stop point of each phase and subordinate tasks, estimated delivery dates, and decision points. Period of performance will be assumed to be the last completion date shown unless otherwise stated.

3.3.4.4. A proposed, task-phased budgetary estimate inclusive of any proposed options. At a minimum, this estimate shall detail estimated labor hours and costs and anticipated material and other costs for each task area. Costs allocated to other organizations (e.g., Government testing) shall also be clearly shown. Estimated production unit costs should also be included.

3.3.4.5. Description of the planned methodology to transition to production and the suggested field support methodology, including:

3.3.4.5.1. Identification of Rights in Technical Data and Computer Software/Patent Rights.
Technical data and computer software to be delivered with less than unlimited rights should be identified as prescribed by DFARS 252.227-7017 and DFARS 252.227-7028.

3.3.4.5.2. Technology Transition. The White Paper shall contain a brief discussion on the proposed concept for commercializing or transitioning the technology to production if the project is successful. If the offeror's proposal is based on technology that has a patent applied for, or issued, the offeror must provide the patent number or application serial number.

3.3.4.5.3 A description of the offeror's capability and/or experience in doing this type of work. Include description of co-participants' capabilities and/or experience as well. State whether agreement has been reached with proposed co-participants. If the offeror is not a commercial entity, a commercial partner must be identified by the time of submission of the white paper or proposal to ensure that a technology transition objective is part of the proposed effort.

3.3.4. Notification to Offeror.
Following review of the White Paper, the Government will notify the offeror (generally within 90 days of the submittal close date) when a submittal has been accepted or rejected. Notification of acceptance accompanied with a request to submit the Phase III requirement (Proposal) will be emailed to the offeror's contracting authority as ***entered in the BIDS registration*** and will indicate the new submittal due date and time. Notifications of rejection will likewise be emailed to the address provided by the offeror during BIDS registration. **Debriefings for White Papers will not be provided due to the nature of BAAs.** It should generally be assumed that the reason a White Paper was not considered for further review was that it did not fit the needs of the TSWG, that it was too costly, or that it failed to meet requirements as specified for technical evaluation.

3.3.5. Status and Inquiries.
Phase II is complete when all submissions have been accepted or rejected in accordance with paragraph 3.3.4 above. Inquiries by phone concerning the status of White Paper submittals will not be accepted. Submitters are able to check the status of any submission by accessing the BIDS website under "My Submissions."

3.4. Phase III Submittals.
Phase III is a request for Full Proposals. To minimize the cost and effort for submitters, full proposals will only be requested for qualifying solutions that have a high probability of award. However, the Government reserves the right to cancel any Phase III solicitation prior to award. A Full Proposal shall consist of two "uploadable" documents. First, the Technical Proposal shall include all technical and contractual information; and shall not exceed 50 pages including figures, charts, and tables, but excluding the cover page and requested contractual forms. Second, the Cost Proposal shall include all cost information to support full evaluation preferably in spreadsheet format. All submittal pages (technical or

cost) shall be 8 ½ x 11 inch, double-spaced with fonts no smaller than 10 point. All margins shall be one inch. The Cost Proposal is not included in the page count, but must be printable, readable, and complete. If the Technical Proposal exceeds the page limit, only the allowed pages will be evaluated.

3.4.1. Phase III Due Date and Time.
All Full Proposals must be received electronically through BIDS (unclassified) or tracked in BIDS and received by mail (classified only) **no later than the due date and time (ET) specified in the notification email**. To upload the documents, locate and open the *accepted* record in BIDS and select **Create Next Submission**. BIDS will not allow proposals to be uploaded or modified after the closing date and time**. Any proposal submitted via other means or that is late will not be considered by the Government.** Refer to Section 3 for special handling and procedures for classified submissions.

3.4.2. Electronic File Format.
The proposal shall be submitted in Microsoft Office 2000 (Word and Excel) or Adobe Acrobat (PDF). The document must be print-capable and without password. The file size including text and graphic content in any document to be uploaded must not exceed 500KB in total file size. Graphic images inserted into submittal documents should be in a file format (such as GIF/JPEG) that will minimize file size and support clear SVGA display and document printing (96 DPI recommended). Improper formatting and/or submittals that cannot be opened or viewed due to formatting will not be considered in the BAA competitive process.

3.4.3. General and Cover Page Format.
The offeror should ensure that the submittal meets the needs of the requirement including cost, technical feasibility, and other evaluation criteria as identified in this BAA. The Full Proposal shall provide information to support the previous phase submittal. If clarification is requested, the offeror shall address each question or concern. The cover page shall include the data specified in the sample provided in BIDS under **Downloads, Reference Materials**. Each page of the submission shall contain the document identifier in the header.

3.4.4. Technical.
The technical portion of the proposal shall contain the following:

3.4.4.1. A title and an abstract that includes a concise statement of work and basic approaches to be used. This should be on a separate page and in a form suitable for release under the Freedom of Information Act, 5 U.S.C. 552, as amended. The statement of work should indicate the effort intended for the period of performance.

3.4.4.2. The technical portion shall include an Executive Summary, a technical approach, description of relevant prior work, a program plan including a statement of work with task phasing and proposed options, facilities and equipment descriptions, list of documentation and reports, and a management plan. All paragraphs containing proprietary information must be clearly marked.

3.4.4.3. The proposal shall include a section on technology transition planning that discusses the proposed approach for commercializing or transitioning the prototype technology to production. This section shall identify any existing intellectual property claims or intentions. The offeror shall specifically indicate if there is a patent pending (and the patent application number, if received) or a patent issued with the patent number(s). The offeror shall include a statement on licensing or venturing plans, as applicable, if the project is successful. The offeror shall discuss barriers to commercialization, such as anticipated regulatory issues (such as environmental, safety, health, and transportation), liability issues, interoperability, financing, etc. and planned steps to address these barriers. Also, if not covered in other sections, this section shall address interaction with potential users.

3.4.4.4. The names, brief biography, and a list of recent publications of the offeror's key personnel (including alternates, if desired) who will be involved in the research. Documentation of previous work or experience in the field of the offeror is especially important.

3.4.4.5. The type of support, if any, the offeror might request from the Government, such as government furnished equipment (GFE), materials (GFM) or facilities.

3.4.4.6. The names of other federal, state, or local agencies or other parties receiving the proposal and/or funding the proposed effort. If none, so state.

3.4.4.7. A statement regarding possible impact, if any, of the proposal's effect on the environment. If none, so state.

3.4.4.8. A brief description of the offeror's organization.

3.4.4.9. The offeror shall indicate the total scope of work to be performed for this effort inclusive of any proposed options.

3.4.5. Cost.

The cost information of the proposal shall contain the following:

3.4.5.1. A cost estimate that is sufficiently detailed by element of cost for meaningful evaluation. Cost estimates shall be identifiable by task phasing proposed in the technical section and shall be inclusive of any proposed options. Cost breakdown shall include materials, direct labor, indirect costs, and other direct costs such as special test equipment or travel. Offerors shall provide exhibits as necessary to substantiate the cost elements.

3.4.5.2. A cost-element breakdown shall be attached for each proposed line item and must reflect all specific requirements. Supporting breakdowns must be furnished for each cost element, consistent with the offeror's cost accounting system. When more than one contract line item is proposed, summary total amounts covering all line items must be furnished for each cost element. If agreement has been reached with Government representatives on the use of forward pricing rates/factors, identify the agreement. Depending on the offeror's system, breakdowns shall be provided for the following basic elements of cost, as applicable:

3.4.5.2.1. Materials: Provide a consolidated price summary of individual material quantities included in the various tasks, orders, or contract line items being proposed and the basis for pricing (vendor quotes, invoice prices, etc.). Include new materials, parts, components, assemblies, and services to be produced or performed by others. For all items proposed, identify the item and show the source, quantity, and price.

3.4.5.2.2. Competitive Methods: For those acquisitions (e.g., subcontract, purchase orders, material orders) over $100,000 priced on a competitive basis, also provide data showing degree of competition and the basis for establishing the source and reasonableness of price. For inter-organizational transfers priced at other than cost of the comparable competitive commercial work of the division, subsidiary, or affiliate of the contractor; explain the pricing method (See FAR 31.205-26(e)).

3.4.5.2.3. Established Catalog or Market Prices/Prices Set By Law or Regulation: When an exemption from the requirement to submit cost or pricing data is claimed, whether the item was produced by others or by the offeror, provide justification for the exemption.

3.4.5.2.4. Noncompetitive Methods: For those acquisitions (e.g., subcontract, purchase orders, material orders) over $550,000 priced on a noncompetitive basis, also provide

data showing the basis for establishing source and reasonableness of price. For standard commercial items fabricated by the offeror that are generally stocked in inventory, provide a separate cost breakdown if price is based on cost. For inter-organizational transfers priced at cost, provide a separate breakdown of cost by elements.

3.4.5.2.5. Direct Labor: Provide a list of participants, not necessarily by name, showing a time phased (e.g., monthly, quarterly) breakdown of labor hours, rates, and cost by appropriate category, and furnish basis for estimates.

3.4.5.2.6. Indirect Costs: Indicate how offeror has computed and applied offeror's indirect costs. Indicate the rates used and provide an appropriate explanation.

3.4.5.2.7. Other Costs: List all other costs not otherwise included in the categories described above (e.g., special tooling, travel, computer and consultant services, preservation, packaging and packing, spoilage and rework) and provide basis for pricing.

3.4.5.2.8. Royalties: If more than $250 provide the following information on a separate page for each separate royalty or license fee:

- Name And Address of Licensor
- Date of the License Agreement
- Patent numbers, Patent Application Serial Numbers, or other basis on which the royalty is payable
- Brief description (including any part or model numbers of each contract item or component on which the royalty is payable)
- Percentage or dollar rate of royalty per unit
- Unit price of contract item
- Number of units
- Total dollar amount of royalties

Note: A copy of the current license agreement and identification of applicable claims of specific patents may be specifically requested by the contracting officer. (See FAR 27.204 and 31.205.37.)

3.4.5.2.9. Facilities Capital Cost of Money: When the offeror elects to claim facilities capital cost of money as an allowable cost, the offeror must submit Form CASB-CMF and show the calculation of the proposed amount. See FAR 31.205-10.

3.4.5.2.10. Fee: Include the fee, if any, proposed for this effort.

3.4.6. Contractual.

The contractual portion of the proposal should contain the following:

3.4.6.1. Identify the offeror's contracting point of contact including name, telephone number, email address, facsimile number, mailing address, and contact information including DUNS number, CCR, business type, and other relevant information.

3.4.6.2. The type of contract preferred. Generally, the contract type most used is Cost Plus Fixed Fee (CPFF).

3.4.6.3. Proposed duration of all tasks in the basic contract and any options.

3.4.6.4. The identity of any members of the organization with potential conflicts of interest. Possible conflicts of interest include any people with prior federal employment including employment of the principal investigator as a special Government employee (duties, agency

with whom employed, dates of employment) within two years from the date of proposal submission. If none, so state.

3.4.6.5. If the offeror is proposing to perform research in a classified area, indicate the level of classification of the research and the level of clearance of the potential principal investigator and all other proposed personnel. The contractor shall include facility clearance information. Also, the contractor shall indicate the Government agency that issued the clearances.

3.4.6.6. A list of property required to perform the proposed research, separating items to be acquired with contract funds and those to be furnished by the Government. When possible, the description or title and estimated or known unit and total costs of each item should be shown (i.e., manufacturer, catalog price, or previous purchase price). When such information on individual items is not available, the items should be grouped by class and estimated values indicated. In addition, the offeror must include a statement as to why it is necessary to acquire the property with contract funds, and if applicable, express in writing his unwillingness or financial inability to acquire the items with his own resources. Please note that the FAR generally prohibits providing an industrial contractor with facilities (including plant equipment and real property) with a unit acquisition cost of less than $10,000.

3.4.6.7. If the total amount of the proposal exceeds $500,000 and the offeror is not a small business, the offeror shall submit a subcontracting plan for small business and small socially and economically disadvantaged business concerns. A mutually agreeable plan will be included in and made a part of the resultant contract. The contract cannot be executed unless the contracting officer determines that the plan provides the maximum practicable opportunity for small business and small disadvantaged business concerns to participate in the performance of the contract.

3.4.7. Notification to Offerors.

Phase III is complete when the Government concludes technical evaluations of all submittals and awards any contracts considered under this BAA. Notification of acceptance or rejection of a Phase III Proposal will be sent via email to the offeror's principal contact as entered in the BIDS registration. A formal debriefing may be requested by the offeror if the Government does not accept the Phase III proposal. Inquiries by phone concerning the status of Phase III prior to official notification will not be accepted. Submitters are able to check the status of any submission by accessing the BIDS website under "My Submissions."

4. PROPOSAL EVALUATION.

4.1. Objective.

The TSWG conducts rapid prototype development focused on critical multi-agency and future threat counter/anti-terrorism requirements. The primary TSWG mission is to conduct the National Interagency Research and Development (R&D) Program for combating terrorism through rapid research, development, and prototyping. This agency's program objectives are to provide an interagency forum to coordinate R&D requirements for combating terrorism, to sponsor R&D not otherwise being addressed by individual agencies, and to promote information transfer among the participating agencies.

4.2. Evaluation Criteria.

The criteria to be used to evaluate and select proposals for TSWG projects are described in the following paragraphs. Each proposal will be evaluated on its merit and relevance to the TSWG program rather than against other proposals in the same general research area.

4.2.1. Basic Requirement.

The proposed solution must meet the letter and intent of the stated requirement; all elements within the proposal must exhibit a comprehensive understanding of the problem and the requirements of intended end users. The proposed solution must meet multiple TSWG user (U.S. Government or commercial) needs and be fully compliant with each required element of the solicitation.

4.2.2. Technical Performance.

The proposed technical approach must be feasible, achievable, complete, and supported by a proposed technical team that has the expertise and experience to accomplish the proposed tasks. Task descriptions and associated technical elements are to be complete and in a logical sequence. All proposed deliverables must clearly define a final product that meets the requirement and can be expected as a result in the award. The proposal must identify and clearly define technical risks and planned mitigation efforts. Those risks and the associated mitigation must be feasible and reasonable. The roles of the prime and other participants required must be clearly distinguished and pre-coordination with all participants (including Government facilities) fully documented. The requirement for and the anticipated use or integration of GFM including all equipment, facilities, and information, must be fully described including dates when such GFM will be required. Intellectual property ownership and the planned transition to production must be adequately addressed, including a support concept for the product described. Similar efforts completed by the offeror in this area must be fully described including identification of other Government sponsors.

4.2.3. Contractor Past Performance.

The offeror's past performance in similar efforts must clearly demonstrate an ability to deliver products that meet the proposed technical performance requirements within the proposed budget and schedule. The proposed project team must have demonstrated expertise to manage the cost, schedule and technical aspects of the project.

4.2.4. Schedule.

The proposed schedule must be complete and achievable. The proposal must indicate that the offeror has fully analyzed the project's critical path and has addressed the resulting schedule risks.

4.2.5. Cost.

The proposed costs must be both reasonable for the work proposed and affordable. The proposal must document all anticipated costs including those of associate, participating organizations. The proposal must demonstrate that the offeror has fully analyzed budget requirements and addressed resulting cost risks. The proposal must indicate all cost-sharing and leveraging opportunities explored and identified. Other sponsors who have funded or are funding this offeror for the same or similar efforts must be identified.

5. TECHNOLOGY DEVELOPMENT REQUIREMENT TARGETS AND OBJECTIVES.

TSWG is interested in soliciting proposals in the following areas of combating terrorism. The intent of this BAA is to identify technologies and approaches that provide near-, mid-, and long-term solutions that enhance the capabilities of the U.S. Government to combat or mitigate terrorism. The level of detail provided for each specific mission area requirement or the order in which requirements appear is not intended to convey any information regarding relative priority. As a reminder, every submittal must have a document identifier as described in Section 3 of this document.

5.1. Chemical, Biological, Radiological and Nuclear Countermeasures (CB).

The Chemical, Biological, Radiological, and Nuclear Countermeasures (CB) Subgroup is responsible to identify, prioritize and execute research and development projects that satisfy DoD, interagency, state and local user requirements to counter the terrorist employment of chemical, biological, radiological or nuclear (CBRN) materials.

R2066 Advanced Alpha and Beta Radiation Detector for Water

Develop an automated batch analysis system to detect alpha- and beta-emitting radioactive materials in flowing or static field and domestic water supplies. Using EPA Method 9310 as a starting point, the system total analysis cycle time (including applicable sampling, preparation, drying, and/or detection steps) shall be less than 4 hrs with a minimum of 6 analysis cycles/day. The timing of analysis cycle steps and number of analysis cycles/day shall be set by the user with the ability to initiate a sampling event and analysis remotely on command. The minimum quantifiable concentration (at the 95% confidence level) is 15 pCi/L for alpha and 50 pCi/L for beta. Consumables shall cost less than $100/month with scheduled maintenance at monthly intervals or longer. In addition to the periodic grab sample, the system shall provide the capability of determining representative time-average concentrations of radioactive emitters present on a daily or weekly basis. The system shall interface with water utility SCADA systems for alarm, reporting, control, and initial remote troubleshooting. The system shall run on AC power with battery backup with the option of a separate battery power supply for field use. Size should be minimized with less than 50 cm on each edge (desired).

R2067 Chemical Contamination Concentration Detector

Develop a capability for the rapid on-site determination and monitoring of hazardous chemical concentrations to guide the selection of respiratory and cutaneous personal protective equipment (PPE) for civilian and military first responders. The system shall detect Chemical Warfare Agents (CWAs) and Toxic Industrial Chemicals (TICs) (most common ITF-40 threat permeator/penetrators) at IDLH concentrations or lower. The device shall accurately determine chemical concentration and transfer data to the operations center (OC) within 5 minutes of set up and be capable of individual or series (area) operation. The system shall be capable of 24-hr operation and monitoring of target area (battery or hard-wired) and radio telemetry and/or hard wire to the OC. The device must be rugged, easy to maintain, self-calibrating, low cost of annual operation (NTE 25% of initial cost), and be capable of being decontaminated. It must reliably operate over a high dynamic range of temperature (-20 °F to 120 °F) and humidity conditions (15% - 100% RH), where it will be exposed to chemicals, salt spray, and precipitation. The system shall be transportable by air, ground, or sea and be powered from commercial-off-the-shelf (COTS) batteries.

R2068 Victim Locator Detector System

Develop a system for the stand-off detection of victims within a standing building or in rubble after a terrorist attack, structural fire, or natural disaster to expedite search and rescue operations and to reduce the risk to rescue personnel. The system shall be able to detect a living human at a range of at least 6 feet (required)/25 feet (desired) through common interior structural wall materials or building rubble. The system shall be able to search a 1000 cubic foot volume in 5 minutes and provide locating information on victims to cue bore-through optical, acoustic, or robotic sensors for more detailed assessments. The system shall provide at least a 95%

confidence level when determining that the search volume does not include any living human victims. The system shall be portable, weighing less than 50 pounds, and fieldable in a backpack configuration (desired). Larger systems will be considered if the increase in capability over smaller, more operationally suitable-sized devices offsets the impact of the larger size. The backpack-sized system must be battery-powered and operate for at least 4 hours on one charge with the capability to hot-swap battery packs. Larger systems may use other power sources.

R2069 Best Practices and Guidelines for Disposal of Contaminated Animal Carcasses and Plant Material

Produce a "Best Practices and Guidelines for Contaminated Plant and Animal Disposal" handbook for distribution to leaders, emergency planners and managers, and regulators in the Federal, State, and local governments and industry. The handbook shall provide guidance to ensure the safe, effective, and economical disposal of plant and animal waste generated from a terrorist attack on the agricultural infrastructure. The guidelines shall be based on a strategic engineering, economic, and regulatory analysis of the options and will build on experience and lessons-learned from foreign and domestic natural outbreaks. Factors such as spatial and temporal availability; disposal and transport capacity (daily throughput and total); personnel requirements; personnel protection needs; decontamination of equipment and facilities; environmental regulations; impacts of climate, terrain, and water resources; and type of incident shall be evaluated. Disposal options shall include, but are not limited to, the following in priority order (high to low): thermal destruction, landfilling, composting, rendering, alkaline hydrolysis, digestion, anaerobic digesters, and ocean disposal. The handbook shall provide information on factors such as transportation needs, infrastructure requirements, energy consumption, and disposal of wastes generated by the disposal process. While providing general guidelines applicable across all diseases, toxins, and chemicals, special considerations for certain diseases or toxic materials should be addressed where required as special cases, for example Transmissible Spongiform Encephalopathies.

R2070 Transportable Gasifier for Destruction of Contaminated Agricultural Biomass

Prepare an engineering design for a large-capacity transportable gasifier system for the disposal of contaminated plant or animal materials. The system shall be used for safe and environmentally benign on-farm disposal of large quantities of contaminated animal carcasses or plants resulting from a terrorist act. The transportable gasifier system must be capable of disposing of not less than 200,000 lbs (required)/300,000 lbs (desired) of wet or dry plant or animal material per 24-hour period. The animal or plant material may be contaminated with fungal, bacterial, viral, or prion pathogens or toxic chemicals to include military warfare agents. The system shall operate for at least one week at temperatures in excess of 800 °C before requiring preventive or corrective maintenance. The waste streams shall meet all national and state air and water quality standards to permit testing, training, and periodic use following natural disease outbreaks or natural disasters without crisis exemption. The system must be mountable for transport on no more than six (6) tractor-trailer-size units, and setup on-site shall take no more than 24 hours on a level site. The system must meet regulatory, size, and weight limits for safe and legal movement on primary and secondary highways. Site preparation required shall be minimized (gravel base and a natural or piped water source). The proposed design shall include all utility supplies (for example, electrical power for monitoring and control systems). Following satisfactory review of the design, the developer shall construct, deliver, and verify the performance of the prototype gasifier.

R2078 Portable ASZM-Carbon HVAC Filter Test Kit

Develop a portable test kit to routinely assess the status of HVAC ASZM-carbon filters. The ASZM-Carbon Test Kit shall determine the remaining effective service life with an error rate of less than 5%. The kit shall be able to provide results within 2 hours (desired) to 24 hours (required), including setup. The kit shall employ up to three micro-chemistry tests or alternative methods that are suitable for the operational capabilities described. The kit shall be easy to use by a trained operator. The kits shall be transportable by commercial air and not be classified as hazardous material by the ICAO/FAA/TSA. The kit shall be storable as carry-on baggage for air

transportation (meeting size and weight requirements and security restrictions).

R000-CB Unspecified Requirement
New or improved technologies or emerging technological capabilities pertaining to Chemical, Biological, Radiological, and Nuclear Countermeasures (CBRNC) that may be of interest to TSWG, but were not specifically requested in this BAA and are not commercially available. Future interests must be timely, relevant, and further the global war on terrorism. Medical applications (vaccines, pharmaceuticals, clinical diagnostics, and syndromic surveillance systems) and battlefield applications are not desired. These areas and other areas that do not directly relate to CBRN countermeasures will be rejected without consideration or comment.

Areas of interest may include:

Personal protective equipment to include respiratory and percutaneous chemical, biological, or radiological protection (gloves, suits, or boots) that can be worn as part of the normal duty uniform or rapidly donned at the first sign of an incident. Equipment for law enforcement, emergency medical technicians, veterinarians, and public utility workers is of particular interest.

Applications of biotechnology to improve breeding, selection, training, sustainment, and care of canines working in a detection and tracking role for the military, law enforcement, and security.

Unspecified requirements (R-000) are for proposing unique innovations that have not yet been identified by TSWG. Submissions against a particular subgroup unspecified requirement may fall under any aspect of that subgroup mission. TSWG does not budget funds towards unspecified requirements. If TSWG evaluators determine that an unspecified requirement submission is promising enough to merit pursuing, funds may be identified at that point. Because proposed technologies from the unspecified requirements will be competing against proposed technologies for identified and prioritized interagency requirements, TSWG may be unable to make any awards against the unspecified requirements.

5.2. Investigative Support and Forensics (IS).
The Investigative Support and Forensics (IS) Subgroup is responsible to identify, prioritize, and execute research and development projects that satisfy interagency requirements for criminal investigation, law enforcement, and forensic technology applications in terrorism-related cases.

R2013 Two-way Multifunctional Encrypted Radio
Develop a two-way, non-trunked, miniature FM radio that offers analog narrowband, analog wideband, Association of Public-Safety Communications Officials (APCO) Project 25 (P25) digital, and APCO P25 digital encrypted operational modes. The radio must have the capability to monitor and record audio transmissions from legacy and future surveillance devices (such as concealable body transmitters) operating in the following modes: analog wideband, analog narrowband, APCO P25 digital, and APCO P25 digital encrypted. The system also should be able to monitor and record two-way clandestine communications supporting command, control, safety, security, and surveillance requirements. The received audio transmissions shall be recorded on removable media. The radio system must have connectors for typical audio accessories, including a remote push-to-talk (PTT) feature, a microphone, and an earpiece. The radio shall support a Bluetooth-type interface, enabling a wireless earpiece option. The external antenna must have circuitry to automatically disable the internal antenna. The radio shall be powered by AA batteries or a common cell phone lithium-ion rechargeable pack. The system must provide at least two watts of RF output in 20% duty cycle (transmit to receive ratio) scenario for an acceptable operational life of the batteries. Full functionality of all capabilities in harsh environments, weather conditions, and temperature ranges is required.

R2014 Statistical Verification of Camouflage Clothing Pattern Comparisons
Develop a method to identify the characteristics on U.S. military camouflage uniforms and any other camouflage-type clothing that can be used to specifically identify an individual piece of such

clothing. The method must address the frequency of repetition and/or intersection of colors to provide a point of identification or exclusion. The method shall identify whether the spatial orientation of seams and pocket patches can provide unique characteristics. The method must provide a statistical comparison of the technique that can be used as a reference for court cases (meets Federal Rules of Evidence, Daubert Requirements). The research must address whether the information gleaned from uniforms can be placed in a database or reference library for comparison and identification.

R2016 Rapid Threat Assessment Screening
Develop a capability for the rapid, real-time threat assessment of an individual's potential terrorist threat at ports of entry or other sensitive entrance areas. This proposed system must integrate physiological signals with biometric information. Preferred procedures are real-time and rely on non-invasive measures and on proven psychophysiological indices and psychometrically sound criteria. System performance must balance the risks associated with the threat environment. The capability must provide for the processing of large numbers of individuals at airports, embassies, border crossings, or other ports of entry where the base rate of intent to do harm is very small. The pre-screening device must be be portable and easily operable for use prior to a more in-depth interrogation.

R2017 Text Attribution
Design and develop computer software tools to automate existing stylometric and related psychological analysis of Arabic and English text to include e-mail, passwords, chat conversations, and other documents. Design analysis to generate investigative leads such as author's age, sex, geographic orientation, English as a second language, and other basic psychological social and personality traits with resultant probabilities. The software shall include the capability to provide the investigator with a probability of a match to other inputted text (from known or unknown authors). Techniques shall include message stream profiling analyses from computational linguistics that have been used in investigations. The solution shall include a combination of techniques and approaches including, but not limited to, clause analysis, common word approach, idiosyncratic indicators, lexicon analysis, unique word approach, and other word use. The software shall have an interface to allow non-technical investigators the ability to upload text for automated analysis. The tools must employ a modular approach so multiple foreign-language capabilities may be developed in subsequent work efforts. Proposed solutions focusing on handwriting recognition will not be considered.

R2025 Fingerprint Recovery from IEDs
Develop a method to enhance the ability to detect latent fingerprints on improvised explosive devices (IEDs), system components, and post-blast fragments that would otherwise go undetected because of heat degradation. Identify the daughter products of the fingerprint residues that remain following degradation and design a method to visualize the latent prints. Test the quality of the fingerprints developed using the new protocols compared to those able to be recovered with presently used techniques. Devise a protocol for the crime scene collection of IEDs and their components in order to maintain the integrity of the latent prints. The Government will provide the post blast components needed for analysis.

R2026 Defensibility of Latent Print Evidence
Compile statistical data relating to the probabilities associated with friction ridge (i.e., fingerprint, palm print, and footprint) comparison and identification. While there have been a number of statistical studies done in the past, the results of these efforts have been considered incomplete. The proposed research must address pattern type and ridge flow (level I), the relative importance of different minutiae and their spatial orientation (level II), and ridge and pore morphology (level III). Any proposal must include: proposed methodologies and experimental designs used for evaluation of the relationship among and within the characteristics of the three levels described, possible data sets (including what databases and population size/distribution will be used), and what measurement tools and features will be utilized (feature selection and extraction, software design and operation, computer or manual systems). Since identifications are performed on the

basis of the quality (e.g., print clarity), quantity (e.g., the amount of identifying and individualizing features), and because of the infrequency of occurrence of friction ridge minutiae, any proposed effort must address these issues as well. It is anticipated that any proposed research shall objectively consider the results generated from previous studies in this area. Additionally, any data generated from this statistical analysis research shall wholly relate to establishing a more robust legal foundation for friction ridge identification and matching testimony as noted in recent U.S. District and Supreme Court decisions like Daubert v. Merrell Dow Pharmaceuticals, 509 U.S. 579 (1993); Kumho Tire Co., Ltd. v. Carmichael, 526 U.S. 137 (1999); and U.S. v. Plaza, Cr. No. 98-362 (E.D. Pa.). Expected deliverables shall be a final report that summarizes the statistical findings in a format that would be acceptable for publication in respected, peer reviewed scientific journals.

R2051 Steganography Decryption by Distributive Network Attack
Develop a distributive network analysis application that can detect, identify, isolate, and decrypt steganography in multiple types of files. The application must have the ability to accurately and quickly identify then fully decrypt all current commercial steganography programs as well as commonly encountered non-commercial steganography programs. The application must be able to harness the unused processing power of up to 100 servers and 10,000 central processing units (CPUs). The system shall have a master control management tool that can monitor tasks being performed and issue jobs to idle some tasks to optimize manager workloads, including the capability to pause an active job to issue a higher priority job, if necessary. The system must be seamlessly interoperable on and with all commonly commercially available personal computers and servers and must work on all clients, supervisors, and master controllers containing DNA 3.0 or better. The system shall have the ability to update all clients remotely from the supervisor(s) and/or master controller.

Any methods and procedures must be scientifically validated in conformance to evidentiary standards per Daubert v. Merrell Dow Pharmaceuticals Inc. [509 U.S. 579 (1993), 43 F3d 1311 (9th Circuit, 1995)] and the applicable Federal Rules of Evidence.

R000-IS Unspecified Requirement
New, advanced, improved, or emerging technologies or capabilities pertaining to Investigative Support and Forensics that may be of interest to TSWG, but were not specifically requested in this BAA and are not commercially available. Any proposals must be timely, relevant, further the global war on terrorism, and may include:

Computer Investigative Technologies. More inclusive and technically advanced detection, identification, and extraction of easily perishable or temporary data of computer and automated systems, especially those relating to the internet and LANs and unauthorized penetration of these systems. Proposals should be outside the realm of data mining. Any proposed tool or technique must be able to function in the physical environment in which terrorism occurs and (where appropriate) be compatible with existing hardware and software platforms. Proposals should be non-proprietary.

General Investigative and Forensic Science Technologies. Faster, more reliable, more widely applicable, more rugged, less costly, or less labor-intensive tools for identification, collection, preservation, or analysis of evidence from improvised explosive devices (pre-incident), from mass casualty crimes, or other post-incident terrorism scenes. This may include advanced technologies to identify, qualify, and quantify post-blast materials and evidence. Consideration will be given to proposals relating to the development of miniaturized or portable forensic testing devices.

Crime Scene Reconstruction and Modeling. New automated tools for reconstructing or creating a model of a terrorist crime scene, especially large and complicated scenarios or post-blast scenes.

Forensic DNA. Advanced tools and technologies that will allow faster, more reliable, more

powerful, less costly, or less labor-intensive identification, collection, preservation, or analysis of terrorism-related DNA evidence. Proposals to develop miniaturized or portable tools for forensic DNA testing will be given priority. Additionally, identification and/or characterization of genetic marker systems that reveal additional or more powerful information, or investigative leads, about the donor of biological evidence are desired.

Surveillance Technology. More advanced technological capabilities for tracking and locating terrorists and their movements, especially clandestine video surveillance. Any proposed tool or technique should be able to function in the physical environment in which terrorism occurs. This may include radio frequency and non-radio frequency technology. Nonproprietary unclassified solutions are strongly encouraged.

Unspecified requirements (R-000) are for proposing unique innovations that have not yet been identified by TSWG. Submissions against a particular subgroup unspecified requirement may fall under any aspect of that subgroup mission. TSWG does not budget funds towards unspecified requirements. If TSWG evaluators determine an unspecified requirement submission is promising enough to merit pursuing, funds may be identified at that point. Since proposed technologies from the unspecified requirements will be competing against proposed technologies for identified and prioritized interagency requirements, TSWG may not make any awards against the unspecified requirements. Proposals pertaining to steganalysis; data mining; report writing; data compilation; detection of concealed bombs; explosives, or weapons; intrusion detection or access control; or any strictly physical security measure should not be submitted. These areas are either not desired or are the responsibility of other subgroups or agencies and will be rejected without consideration or comment.

5.3. Physical Security (PS).

The Physical Security (PS) Subgroup is responsible to identify, prioritize and execute research, development, testing and evaluation of projects that satisfy interagency requirements for physical security support to protect personnel and vital equipment and facilities against terrorist attacks.

R2040 Tamper-Indicating Paint

Develop a permanent liquid coating that will be reactive to an 'attack' by a tool as it penetrates the surface of the coating. The coating must remain dormant and unreactive to casual contact, brushing, or any other form of innocuous contact.

At a minimum, damaged areas of the coating will glow brightly under UV light. It is desired that the dormant, undamaged coating will be sensitive to UV light (in contrasting color) and that the damaged coating discharge a chemical that will permanently stain skin for a period of seven days and glow under a UV light, or will emit a very distinctive and pungent odor.

The coating should be capable of being applied using standard methods including spray, roller, and brush. The coating will be applied to interior or exterior surfaces and must comply with all Federal environmental and health requirements for coating systems, including VOC limits and hazardous air pollutants as defined by the U.S. EPA. The coating may come in exterior and interior versions, but must not fail as a coating system or lose reactive characteristics for five years in sunlight and coastal weather.

R2046 Swimmer/Diver Engagement and Interdiction System

Conduct a market survey of available and near-term technologies, develop a concept of operations (CONOPS), and develop a system design to positively stop, deter, or deny swimmers and divers further access once they have been detected entering into a security exclusion zone. This requirement includes both non-lethal and lethal means of positively stopping a swimmer or diver. A scalable response from non-lethal through lethal means is desired, but non-scalable solutions will be considered. The system must operate effectively in typical port conditions (depths, water conditions, weather conditions, and underwater noise environments) that exist in U.S. domestic ports, and in foreign ports where U.S. military vessels might visit. Systems with

the least amount of environmental impact and collateral injury to marine life are preferred. The system must be deployable from a small boat (approximately 25 ft in length), over the side of a large ship (greater than 100 ft), or from a fixed site such as a pier or shore-side facility. Ease of handling for deployment and retrieval are important aspects of the desired solution. Remote operation, especially for a fixed site or large ship deployment is a desirable attribute for the system. The system can either be self-powered (stored energy) or be powered by the power typically available in the country of use or on the specified deployment platform. A low-cost single-use item is acceptable, but a multiple-use system is preferred. The deliverable for this task is a system description and concept of operation consistent with U.S. Navy and U.S. Coast Guard security functions, interoperable with typical port security equipment, and suitable for deployment by current security forces. It must be emphasized that in this initial effort, we do not want a hardware deliverable (unless a hardware solution already exists, in which case the submitter should so state). In this effort, we want a survey and an evaluation of the applicable technologies, which should result in a design document and associated CONOPS that can be pursued further in a developmental effort, if desired. Also, we do not want a swimmer/diver detection system; however, correlation of the produced system design for a swimmer/diver engagement and interdiction system with an applicable detection system should be discussed in the developed system design package.

R2047 Wireless Sensor System

Develop and test a wireless sensor network integrating seismic, acoustic, IR, and/or other intrusion detection and assessment technologies capable of detecting and tracking human and vehicle intruders while excluding local wildlife. The system is to be deployed in forested or otherwise visually obstructed areas. System cost is a major factor. The system must provide security personnel with a situational awareness overview, alarm on detection of threat events, track multiple intruders, determine direction and speed of travel, and provide information for operators to identify and locate potential adversaries. The command and control unit will be a typical PC-based system.

Sensors must be weathertight, self-locating, and capable of day and night operations using available energy sources, including battery if necessary. Each sensor must have its own address, have a self-diagnostic capability, and be capable of transmitting a fault code prior to failure (preferable) or upon failure (minimal requirement). The system must inform operators of all active and inactive sensors, regardless of whether a fault code is received. The system must be scalable and capable of covering large terrain areas.

The system must interface with the open Geographic Information System (GIS) Feature Services for the National SensorNet architecture, using standard IEEE formats, digital radio, or similar network.

Deliverables will include the hardware sufficient to cover the perimeter of a 1 X 2 kilometer area, and the system must be DoD "TASS" compatible.

R2073 Tunnels and Tunneling Detection System

Develop and field-test a prototype tunnel detection and tunneling activity detection system suitable for use by U.S. military and law enforcement personnel in domestic and foreign locations. The system must be capable of scanning the earth to 50 feet below the surface and be usable in urban and rural locations without creating safety or environmental hazards. The system must be capable of displaying a three-dimensional composite picture of the area scanned and must compare the results of scans from prior and subsequent surveys in such a way as to trace a tunnel's path. The system must be capable of providing operators clear information on the quality of the data and provide indicators of system limitations such that the reliability of the information can be estimated. The system should be air or surface deployed, with minimal and preferably no digging, drilling, or core sampling required. Data acquisition should be relatively fast and accuracy of tunnel location sufficient to allow a protective response. Data analysis might be performed at a facility away from the location being scanned to reduce the required time on site

by the operator, especially in unsafe areas, and/or to reduce the weight of the scanning hardware, especially if hand-carried or airborne. To speed data analysis and provide more real-time results, wireless or wired data transfer to such a data analysis facility might be considered. Vendor may propose an air or surface vehicle-mounted or hand-emplaced system and should indicate the estimated time to scan a 50 X 500 meter section. The program should be time-phased with measurable objectives and required funding for each phase.

R2099 Situational Awareness For Convoys
Develop an integrated sensor system that can be placed on a moving platform to identify and locate moving or parked vehicles that might pose an immediate, potential threat from an onboard Improvised Explosive Device (IED) to a convoy. The system must identify and immediately alert convoy commanders regarding potential threat vehicles that are moving toward the convoy or parked in the path of the convoy. The system must detect stationary or moving threat objects; calculate position, speed, and direction; and determine the level of threat to individual convoy elements based on convoy element position, speed, and direction. The system must accept GIS map products and/or aerial photographs as overlays to display streets, buildings, and other obstacles. The system should also allow operators to filter out parked vehicles that are not blocking the road or are not posing an obvious potential IED threat to the convoy. The system should also function during both day and night and during bad weather (rain, snow, sand, etc.). The system must detect and track at a minimum an object the size of a compact car. Also desirable would be the ability to detect and track smaller vehicles (motorcycles, scooters, bicycles, etc.), and even people. The system should be able to track up to 100 targets simultaneously and prioritize those that pose an immediate potential threat to the convoy. Critical metrics consist of probability of detection, probability of false alarm, detection threshold, stand-off, and ability to detect and track potential threats while moving. It must be emphasized that we do not want an explosive detection or IED detection system. The desired deliverable is a situational awareness security system for the convoy commander.

5.4. Training Technology Development (TTD).
The Training Technology Development (TTD) Subgroup is responsible to identify, prioritize, and execute projects that satisfy interagency requirements for the development and delivery of combating terrorism related education, training, and mission performance support products and technologies.

R2006 Competency Data Management and Modeling
Design and develop an automated tool for modeling, representing, and managing competency data (knowledge, skills, and abilities or KSAs) and competency-based training records in a Web-based, advanced distributed learning (ADL) environment. The tool must be capable of representing discrete (individual) competency definitions and the structured collections of competencies (competency maps) used in combating terrorism training programs. Storing and managing these definitions is separate from managing individual training records. The tool must also provide a separate capability to store a learner's training records (competency records) that relate training outcomes and evidence to competencies and competency maps.

The tool must provide support for unique identification of competency data, access to competency and competency maps, and exchange of this data with other systems using open standards-based XML representations and Web service interfaces. The tool must support the development of models and collections of competency data to meet the needs of different constituencies based on domain (e.g., Federal, State, and local; homeland defense, homeland security, and emergency response; standards organizations and bodies; Federal, State, and local sources for training; etc.) and must support the unique taxonomies or ontologies describing competencies and training within those domains.

The resulting tool shall be compatible with the Shareable Content Object Reference Model (SCORM) 2004 or later, the Content Object Repository Discovery and Registration/Resolution Architecture (CORDRA), applicable international standards for identifiers (e.g., NISO, ISO), and standards for modeling of competencies and human resource data (e.g., HR-XML). The tool

must provide for linkages to commercial-off-the-shelf (COTS) and open-source learning management systems (LMSs) to enable an LMS to use the competency data in planning training and in associating learner outcomes with evidence-based human resource and training records. The tool shall provide users with an easy-to-use, human-system interface and navigation, and shall conform to World Wide Web Consortium (W3C) Web technology standards and applicable accessibility standards. The tool will be operational via standard industry Web browsers operating on personal computer systems with the following minimum system requirements – Pentium II/III or equivalent, 300 MHz, 128 MB RAM, audio and video capable, 32X CD-ROM, 56K modem, with Windows 98, 2000, or XP operating system.

R2007 Modular and Mobile Job Aids

Design and develop an automated tool to identify, extract, and configure Shareable Content Object Reference Model (SCORM) enabled sharable content objects as job aids. Content objects (learning objects, skills objects, reference objects, etc.) are being developed and placed in repositories where they can be extracted to meet the needs of multiple user communities. Most of this is being done through learning management systems (LMS) to construct full courses. In addition to LMS-based online course delivery, there is a need to assemble content objects capable of being delivered in modular form using a variety of mobile technologies and platforms: Pocket/Tablet/Wearable PCs, Mobile Phones, PDAs, etc.

There are several file formats that cannot migrate to mobile devices though they might be SCORM conformant. This tool must be able to flag content objects that may be reused in mobile environments. The tool must provide support for managing competency data. By organizing content objects using competencies, learning modules would be vetted based on performance objectives drawn from existing content. The modules could then be integrated as specific core elements in a course of instruction, or as modules that could be accessed conveniently by different constituencies (i.e., Federal, State, and local; homeland defense, homeland security, and emergency response; standards organizations and bodies; Federal, State, and local sources for training; etc.) seeking training on specific competencies.

The resulting tool shall be compatible with the SCORM 2004 or later, the Content Object Repository Discovery and Registration/Resolution Architecture (CORDRA), applicable international standards for identifiers (e.g., NISO, ISO), and standards for modeling of competencies (e.g., HR-XML). The tool must provide for linkages to commercial-off-the-shelf (COTS) and open-source learning management systems (LMS) to enable an LMS to use the competency data in planning training and in associating learner outcomes with evidence-based human resource and training records. The tool shall provide users with an easy-to-use, human-system interface and navigation and shall conform to World Wide Web Consortium (W3C) Web technology standards and applicable accessibility standards. A demonstration of the tool using Government-approved content shall be included as a deliverable. The tool will be operational via standard industry Web browsers operating on personal computer systems with the following minimum system requirements – Pentium II/III or equivalent, 300 MHz, 128 MB RAM, audio and video capable, 32X CD-ROM, 56K modem, with Windows 98, 2000, or XP operating system.

R2015 Science Foundations for Bomb Squad Training

Design and develop specialized “skills enhancement” training modules for electronics (in relation to Improvised Explosive Device (IED) components), chemistry (in relation to conventional and improvised explosives), and physics (in relation to explosive effects and explosively driven render-safe tools). Training will focus on the basic science behind each of these areas, allowing interested bomb technicians to broaden their knowledge, skills, and abilities. The training will provide a better foundation of understanding how and why electronics and explosives function the way that they do. The training must be trainee-centered, incorporate distributed practice exercises throughout the training experience, provide immediate feedback, enforce remedial training, and incorporate usability and instructional best practices. The training must provide parallel practical application exercises in which the user will be given a list of specific electronic items to purchase and instructions on various kits to build. Each of the modules will avoid any

attempts to address bomb response doctrine and philosophy and will focus instead on understanding the basic scientific issues.

The training must be Shareable Content Object Reference Model (SCORM) 2004 conformant. The training must be produced in both Web and CD-ROM delivery formats. Both formats will be equivalent in structure, content, and fidelity. Both formats will be operational via standard industry Web browsers operating on personal computer systems with the following minimum system requirements – Pentium II/III or equivalent, 300 MHz, 128 MB RAM, audio and video capable, 32X CD-ROM, 56K modem, with Windows 98, 2000, or XP operating system.

R2088 Training Needs Analysis and Online Program for IEDs
Conduct a large-scale Training Needs Analysis (TNA) of operational units to cover activities across the spectrum of the global war on terrorism as related to improvised explosive devices (IEDs). Specifically, proposals will focus on the following: mission area analysis, IED awareness, preparation for and response to IED encounters, consequence mitigation, and post-blast operations. Areas of analysis include, but are not limited to, Explosive Ordnance Disposal (EOD) Response units, Intelligence units, Force Protection/Security units, as well as operational and support personnel. Information sources may include, but are not limited to, SME and potential end user interviews, pre- or post-deployment personnel, after action reviews, and centers for lessons learned.

Identify and prioritize current training information needs based on the results of the TNA. Develop a strategic training plan to include a proposed program of instruction. Develop and implement a program of online courses, Training Support Packages (TSPs), and awareness briefings.

The training solutions must be level-3 interactive Shareable Content Object Reference Model (SCORM) 2004 conformant. The training solutions must provide for linkages to commercial-off-the-shelf (COTS and open-source learning management systems (LMSs) and LMSs on classified networks.

The solutions must be accessible through two delivery methods. First, the solutions will be accessible via standard industry Web browsers operating on personal computer systems with the following minimum system requirements – Pentium II/III or equivalent, 300 MHz, 128 MB RAM, audio and video capable, 32X CD-ROM, 56K modem, with Windows 98, 2000, or XP operating system. Second, any unclassified solutions must be accessible via mobile devices including, but not limited to, pocket/tablet/wearable PCs, mobile phones, and PDAs.

The offeror shall have the capability and facilities to conduct classified work up to a Secret level. Proposals that do not clearly identify the capability and facilities to conduct classified work will be rejected without comment or consideration.

R000-TTD Unspecified Requirement
Develop training and training technologies to increase mission readiness and enhance the operational capabilities of all elements, to include both military and civilian communities, involved in combating terrorism and consequence management. The technologies shall provide valuable knowledge, skills, and abilities in order to deter, prevent, defeat, mitigate, and respond to terrorist threats. This includes the development of new or improved computer-based combating terrorism training courses, training aids, devices, and simulations. These training products shall support the life cycle of research and development to include: design, development, implementation, evaluation, verification and validation testing, and technology transition. Additionally, all proposed computer-based training solutions shall prototype and establish state-of-the-art Advanced Distributed Learning (ADL) delivery systems that are SCORM 2004 conformant to military and civilian personnel involved in combating terrorism and emergency response. Models, architectures, software, hardware, tools, and other applications not directed towards a training need are not desired. These proposals will be rejected without consideration or comment.

ATTACHMENT A – ACRONYMS AND ABBREVIATIONS

3D	Three Dimensional
AC	Alternating Current
ACLS	Advanced Cardiac Life Support
ADL	Advanced Distributed Learning
AFIS	Automated Fingerprint Information System
ANSI	American National Standards Institute
ATLS	Advanced Trauma Life Support
ATP	Active Thermal Protection
BAA	Broad Agency Announcement
BIDS	BAA Information Delivery System
BX	Blast Effects and Mitigation (mission area/subgroup designation)
CAD	Computer Aided Drawing
CASB-CMF	Cost Accounting Standards (CAS) Board - Cost of Money Factors
CB	Chemical, Biological, Radiological, and Nuclear Counter Measures (Also CBRNC or CBRN or CBR) (mission area/subgroup designation)
CCD	Charge Coupled Detector
CCR	Central Contractor Registration
CD	Compact Disk
CDC	Center for Disease Control
CFR	Code of Federal Regulations
COFDM	Coded Orthogonal Frequency Division Multiplexing
CONOPS	Concept of Operations
CORDA	Content Object Repository Discovery and Registration/Resolution Architecture
COTS	Commercial-Off-The-Shelf
CPFF	Cost Plus Fixed Fee
CQB/SWAT	Close Quarter Battle/Special Weapons Assault Team
CTTSO	Combating Terrorism Technology Support Office
DAIS	Digital Automotive Image System
DC	Direct Current
DFARS	Defense Federal Acquisition Regulation Supplement
DHS	Department of Homeland Security
DPI	Dots per inch
DUNS	Data Universal Numbering System
ED	Explosives Detection (mission area/subgroup designation)
EDT	Eastern Daylight Time
EL	Explosive Ordnance Disposal/Low Intensity Conflict (Also EOD/LIC) (mission area/subgroup designation)
EOD/SOF	Explosive Ordnance Disposal/Special Operations Forces
EPA	Environmental Protection Agency
ERPG	Emergency Response Planning Guidelines
EST	Eastern Standard Time
ET	Eastern Time Zone
ET-SCBA	Expedient Tactical Self Contained Breathing Apparatus
FAA	Federal Aviation Administration
FAQ	Frequently Asked Question
FAR	Federal Acquisition Regulation
FCCM	Facilities Capital Cost Of Money
FDA	Food and Drug Administration
FDR	Flight Data Recorder
FFT	Fast Fourier Transform
FOIA	Freedom of Information Act
FORAX	Fiber Optic Remote Amplifier Extension
FP	Full Proposal
fps	Feet per second
FSW	Feet of Sea Water
ft	Feet
FY	Fiscal Year
G/T	Gain to Noise
GFE	Government Furnished Equipment
GFI	Government Furnished Information
GFM	Government Furnished Material
GIF	Graphics Interchange Format
GIS	Geographic Information System
GOTS	Government-Off-The-Shelf
GPS	Global Positioning System
GUI	Graphical User Interface
HBCU	Historically Black Colleges, Universities
He	Helium
HR	Human Resources
HUB Zone	Historically Underutilized Business Zone
HVAC	Heating Ventilation and Air Conditioning
Hz	Hertz
ICAO	International Civil Aviation Organization
IDD	Improvised Device Defeat (mission area/subgroup designation)
IDHL	Immediately Dangerous to Health or Life
IED	Improvised Explosive Device
IEEE	Institute of Electrical and Electronics Engineers
IP	Infrastructure Protection (mission area/subgroup designation)
IR	Infrared
IRB	Institutional Review Board
IRIG	Inter-Range Instrumentation Group
IS	Investigative Support and Forensics (Also ISF) (mission area/subgroup designation)
ISO	International Standards Organization
JPEG	Joint Photographic Experts Group
K	Thousand
KB	Kilobyte
Kg	Kilograms
KSA	Knowledge, Skills, and Abilities
Lbs	Pounds
LIC	Low Intensity Conflict
LMS	Learning Management System
LOS	Line of Sight
LVB	Large Vehicle Bomb(s)
MANPADS	Man Portable Air Defense System
MB	Megabyte
MHz	Mega-Hertz
MI	Minority Institutions
mm	millimeter
NAICS	North American Industry Classification System
NBC	Nuclear, Biological, and Chemical
NCID	National Critical Infrastructure Database
NFPA	National Fire Protection Association
NGEODRCV	Next Generation Explosive Ordnance Disposal Remote Controlled Vehicle
NISO	National Information Standards

	Organization
NIST	National Institute of Standards
OC	Operations Center
ORCA	On-line Representation and Certifications
OS	Operating System
OSHA	Occupational Safety and Hazard Association
PCs	Personal Computers
PDAs	Personal Digital Assistants
PDF	Portable Document Format
PETN	pentaerythritol tetranitrate
PL	Public Law
POTS	Plain Old Telephone Service
PPE	Personal Protective Equipment
PS	Physical Security (mission area/subgroup designation)
PSTN	Public Switched Telephone Network
PSYOPS	Psychological Operations
PTT	Push-to-talk
QC	Quad Chart
R&D	Research and Development
Rad	Radians
RAM	Random Access Memory
RAMP	Remote Multi-band Amplifier
RCV	Remote Controlled Vehicle
RDX	Cyclotrimethylenetrinitramine
RF	Radio Frequency
RFID	Radio Frequency Identification
RH	Relative Humidity
RT	Receiver/Transmitters
SBA	Small Business Administration
SCADA	
SCUBA	Self-Contained Breathing Apparatus
SCORM	Shareable Content Object Reference Model
SDB	Small Disadvantaged Business
SF	Standard Form
SIT	Submitter Internal Tracking (Number)
SME	Subject Matter Expert
SNM	Special Nuclear Material
SOW	Statement of Work
SP	Special Projects (mission area/subgroup designation)
SVGA	Super Video Graphics Array
TASS	Tactical Automated Security System
TIC	Toxic Industrial Chemical
TIM	Toxic Industrial Material
TNA	Training Needs Analysis
TOS	Tactical Operations Support (mission area/subgroup designation)
TSA	Transportation Security Administration
TSP	Training Support Package
TSWG	Technical Support Working Group
TTD	Training Technology Development (mission area/subgroup designation)
UAV	Unmanned Air Vehicle
USB	Universal Serial Bus
USC	United States Code
UV	Ultra-violet
VAC	Volts AC (alternating current)
VBIEDs	Vehicle Borne Improvised Explosive Devices
VIP	Very Important Person
VIP	VIP Protection (mission area/subgroup designation – Formerly PP)
VOC	Volatile Organic Compounds
W3C	World Wide Web Consortium
WP	White Paper
www	World Wide Web
XML	Extensible Markup Language